

ABSTRACT OF THE DISCLOSURE

MACRO-BASED DYNAMIC DISCOVERY OF DATA SHAPE

The present invention comprises a Dynamic Query Interface (DQI). The DQI provides an apparatus and method for dynamically discovering the shape of data returned by a DBMS in response to a query statement. The DQI comprises a Query Schema, a Select Macro, and a Macro Expansion Module (MEM). Unlike conventional query statements, a Select Macro only requires a select-clause. The MEM builds a conventional query statement from a Select Macro using information contained in the Query Schema. The Macro Token expansion approach implemented in the MEM obviates the need for full language parsing and is thus much more suited to runtime execution than prior art solutions. Furthermore, because the MEM examines a Select Macro at runtime, the MEM has the added advantage over prior art solutions of being able to discover dynamically the shape of the requested data at runtime.